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STRUCTURE FILE UPDATES: 24 SEP 2006 HIGHEST RN 908332-13-8 DICTIONARY FILE UPDATES: 24 SEP 2006 HIGHEST RN 908332-13-8

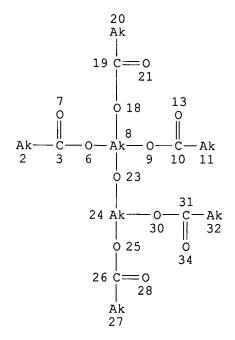
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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html



NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 23 STEREO ATTRIBUTES: NONE

L8 12 SEA FILE=REGISTRY CSS FUL L6

L9 6 SEA FILE=REGISTRY ABB=ON PLU=ON L8 NOT PROPENOIC

L10 6 SEA FILE=REGISTRY ABB=ON PLU=ON L8 NOT L9

=> d ide can tot 110

L10 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 169158-41-2 REGISTRY

ED Entered STN: 20 Oct 1995

CN 2-Propenoic acid, 2-[2-[(1-oxo-2-propenyl)oxy]ethyl]-2-[[4-[(1-oxo-2-propenyl)oxy]-2-[[(1-oxo-2-propenyl)oxy]methyl]butoxy]methyl]-1,4-butanediyl ester (9CI) (CA INDEX NAME)

MF C27 H36 O11

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 123:270709

L10 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 159996-68-6 REGISTRY

ED Entered STN: 06 Jan 1995

CN 2-Propenoic acid, 2-methyl-2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)

MF C25 H32 O11

SR CA

LC STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 122:68238

L10 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 149038-62-0 REGISTRY

ED Entered STN: 30 Jul 1993

CN 2-Propenoic acid, 1-[(1-oxo-2-propenyl)oxy]-1-[[3-[(1-oxo-2-propenyl)oxy]-2-[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-1,2-ethanediyl ester, homopolymer (9CI) (CA INDEX NAME)

MF (C22 H26 O11) x

CI PMS

PCT Polyacrylic

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 149038-61-9 CMF C22 H26 O11

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:82859

L10 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 149038-61-9 REGISTRY

ED Entered STN: 30 Jul 1993

CN 2-Propenoic acid, 1-[(1-oxo-2-propenyl)oxy]-1-[[3-[(1-oxo-2-propenyl)oxy]-2-[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

MF C22 H26 O11

CI COM

SR CA

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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ANSWER 5 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
L10
                              141313-83-9 REGISTRY
 RN
ED
                              Entered STN: 15 May 1992
                              2-Propenoic acid, 2-[[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]methylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethylloxymethyll
CN
                              propenyl)oxy]-2-[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-1,3-
                              propanediyl ester, homopolymer (9CI) (CA INDEX NAME)
MF
                               (C24 H30 O11)x
CI
                              PMS
 PCT
                              Polyacrylic
SR
                              CA
LC
                              STN Files:
                                                                                                          CA, CAPLUS, USPATFULL
                              CM
                                                             1
                              CRN 141313-82-8
```

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 116:224683

CMF C24 H30 O11

L10 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN RN 141313-82-8 REGISTRY ED Entered STN: 15 May 1992 CN 2-Propenoic acid, $2-[[(1-\infty -2-propenyl))] -2-[[3-[(1-\infty -2-propenyl)]]$ propenyl)oxy]-2-[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-1,3propanediyl ester (9CI) (CA INDEX NAME) MF C24 H30 O11 CI COM SR CA LC STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 122:68238

=> d his 110-

(FILE 'REGISTRY' ENTERED AT 15:50:51 ON 25 SEP 2006) L10 6 S L8 NOT L9

FILE 'HCAOLD' ENTERED AT 16:01:36 ON 25 SEP 2006 L11 0 S L10

FILE 'HCAPLUS' ENTERED AT 16:01:38 ON 25 SEP 2006 L12 4 S L10

FILE 'USPATFULL' ENTERED AT 16:02:46 ON 25 SEP 2006 L13 2 S L10

FILE 'HCAPLUS, USPATFULL' ENTERED AT 16:03:02 ON 25 SEP 2006 L14 5 DUP REM L12 L13 (1 DUPLICATE REMOVED)

FILE 'REGISTRY' ENTERED AT 16:03:16 ON 25 SEP 2006

=> fil hcaplus uspatful FILE 'HCAPLUS' ENTERED AT 16:03:30 ON 25 SEP 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 16:03:30 ON 25 SEP 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l14 bib abs hitstr retable tot

L14 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

AN 1995:662912 HCAPLUS

DN 123:270709

TI Electrophotographic photosensitive member and electrophotographic apparatus, device unit and facsimile machine using the same

IN Maruyama, Akio; Kikuchi, Toshiro; Amamiya, Shoji; Nagahara, Shin; Aoki, Katsumi

PA Canon K. K., Japan

SO U.S., 43 pp. Cont.-in-part of U.S. Ser. No. 852,720, abandoned. CODEN: USXXAM

DT Patent LA English FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| | | | | | |
| PI | US 5422210 | Α | 19950606 | US 1992-968465 | 19921029 |
| | JP 05100464 | A2 | 19930423 | JP 1992-62306 | 19920318 |
| | JP 2584930 | В2 | 19970226 | | |
| PRAI | JP 1991-77290 | Α | 19910318 | | |
| | JP 1991-77291 | Α | 19910318 | | |
| | JP 1991-77292 | Α | 19910318 | | |
| | US 1992-852720 | B2 | 19920317 | | |
| | JP 1992-62306 | Α | 19920318 | | |
| ~ ~ | MADDAM 100 070700 | | | | |

OS MARPAT 123:270709

AB An electrophotog, photosensitive member comprises a conductive support, a photosensitive layer and a protective layer, the protective layer containing resin formed by hardening a light-setting type acrylic monomer, and the photosensitive layer containing ≥1 compound selected from the group consisting of (A), (B) and (C) below: (A) styryl compds. $(Ar1)(Ar2)N-Ar3-(CH:C(R2))n-R1 (m.p. \le 135°)$ [Ar1 and Ar2 are aromatic ring groups, Ar3 is a bivalent aromatic ring group or a bivalent heterocyclic group, R1 is an alkyl group or an aromatic ring group, R2 is a H atom, an alkyl group or an aromatic ring group, and n is 1 or 2, R1 and R2 possibly linking to form a ring when n = 1]; (B) triarylamine compound having a structure expressed by the following formula Ar4Ar5NAr6 (m.p. ≤150°) [Ar4, Ar5 and Ar6 = aromatic ring group or a heterocyclic group]; (C) hydrazone compds. A-[CR3:NNR4R5]m (m.p. ≤155°) [R3 is a H atom or an alkyl group, R4 and R5 are alkyl groups, aralkyl groups or aromatic ring groups, m is 1 or 2, A is an aromatic ring group, a heterocyclic group or -CH:C(R6)R7 (R6 and R7 are H atoms, aromatic ring groups or heterocyclic groups, but will never be H atoms at the same time)]. The photosensitive member suppresses the occurrence of cracks during forming of the protective layer, has high durability, and is free from any image defects.

IT 169158-41-2

RL: DEV (Device component use); USES (Uses) (protective layer for electrophotog. photoconductor)

RN 169158-41-2 HCAPLUS

CN 2-Propenoic acid, 2-[2-[(1-oxo-2-propenyl)oxy]ethyl]-2-[[4-[(1-oxo-2-propenyl)oxy]-2-[[(1-oxo-2-propenyl)oxy]methyl]butoxy]methyl]-1,4-butanediyl ester (9CI) (CA INDEX NAME)

L14 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:274876 HCAPLUS

DN 122:68238

- TI Crack-resistant durable electrophotographic photoreceptors providing flawless images and electrophotographic devices and facsimiles using the same
- IN Maruyama, Akio; Nagahara, Susumu; Amamya, Shoji; Aoki, Katsumi; Tsuji, Haruyuki; Mayama, Shinya
- PA Canon Kk, Japan
- SO Jpn. Kokai Tokkyo Koho, 29 pp. CODEN: JKXXAF
- DT Patent
- LA Japanese

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------|------|----------|-----------------|----------|
| | | | | |
| PI JP 06011877 | A2 | 19940121 | JP 1992-191360 | 19920626 |
| JP 3050701 | B2 | 20000612 | | |
| PRAI JP 1992-191360 | | 19920626 | | |
| CT | | | | |

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB The title photoreceptors have an elec. conductive support, a photosensitive layer, and a protective layer, wherein the protective layer is a photocured acrylic layer, and the photosensitive layer contains binders chosen from I and II (A, B = C1-10 alkylidene, alkylene, aralkylene, arylene, O, CO, S, SO, SO2; R1-6, R11-16 = H, halogen, alkyl, aryl, aralkyl, alkenyl; R7 = C1-10 alkylidene, alkylene, aralkylene, arylene; n = pos. integer; x, y = 0.05-0.9; X = O, S).
- IT 141313-82-8 159996-68-6
 - RL: TEM (Technical or engineered material use); USES (Uses) (photocured protective coatings; Crack-resistant durable electrophotog. photoreceptors providing flawless images for electrophotog. devices and facsimiles)
- RN 141313-82-8 HCAPLUS
- CN 2-Propenoic acid, 2-[[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]-2-[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)

- RN 159996-68-6 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-1,3-propanediyl ester (9CI) (CA INDEX NAME)

L14 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:482859 HCAPLUS

DN 119:82859

TI Electrophotographc photoreceptor, apparatus, and facsimile using it

N Hashimoto, Juichi; Koyama, Takashi; Mayama, Shinya; Maruyama, Akio; Nagahara, Susumu

PA Canon Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| | | | | | |
| ΡI | JP 04350664 | A2 | 19921204 | JP 1991-150874 | 19910528 |
| PRAI | JP 1991-150874 | | 19910528 | | |

AB In the photoreceptor with an interlayer and photosensitive layer successively coated on a substrate, the interlayer contains a resin prepared by polymerizing ≥3-valent curable acrylic monomer and metal oxide ultrafine particles. The electrophotog. apparatus and facsimile using the photoreceptor are also claimed. The photoreceptor shows stable charging properties in various environmental conditions and gives stable images on repeated use.

IT 149038-62-0

RL: USES (Uses)

(electrophotog photoreceptor interlayers containing)

RN 149038-62-0 HCAPLUS

CN 2-Propenoic acid, 1-[(1-oxo-2-propenyl)oxy]-1-[[3-[(1-oxo-2-propenyl)oxy]-2-[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-1,2-ethanediyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 149038-61-9 CMF C22 H26 O11

L14 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1992:224683 HCAPLUS

DN 116:224683

TI Electrophotographic photosensitive member

IN Maruyama, Akio; Nagahara, Shin; Ohtani, Noriko; Mayama, Shinya

PA Canon K. K., Japan

SO Eur. Pat. Appl., 25 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

|] | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|--------------|----------------------------------|-----------------|----------|
| | EP 460558 EP 460558 | A1 B1 | 19911211 19960207 | EP 1991-108999 | 19910603 |
| | R: DE, FR, GB JP 04226469 | A2 | 19920817 | JP 1991-131198 | 19910603 |
| Ţ | JP 2801427 US 5391449 JP 1990-146431 | B2 A A | 19980921 19950221 19900604 | US 1993-31023 | 19930311 |
| | US 1991-709822 | B1 | 19910604 | | |

AB An electrophotog. photosensitive member is formed by disposing a photosensitive layer and a protective layer in this order on an electroconductive support. The protective layer is formed from a resin obtained by polymerization of a curable acrylic monomer having ≥3 acrylic groups, i.e., acryloyl and/or methacryloyl groups. The protective layer not only shows a good durability but also can contain fine electroconductive particles with a good dispersibility, because of the presence of the acrylic groups aiding the dispersion.

IT 141313-83-9

RL: USES (Uses)

(Electrophotog. photoconductors with protective layer from)

RN 141313-83-9 HCAPLUS

CN 2-Propenoic acid, 2-[[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]-2-[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-1,3-propanediyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 141313-82-8 CMF C24 H30 O11

L14 ANSWER 5 OF 5 USPATFULL on STN

AN 95:15901 USPATFULL

TI Electrophotographic photosensitive member

IN Maruyama, Akio, Tokyo, Japan Nagahara, Shin, Tokyo, Japan Ohtani, Noriko, Yokohama, Japan Mayama, Shinya, Yamato, Japan Canon Kabushiki Kaisha, Tokyo, Japan (non-U.S. corporation) PΑ PΙ US 5391449 19950221 ΑI US 1993-31023 19930311 (8) RLI Continuation of Ser. No. US 1991-709822, filed on 4 Jun 1991, now abandoned JP 1990-146431 PRAI 19900604 DТ Utility FS Granted EXNAM Primary Examiner: Goodrow, John Fitzpatrick, Cella, Harper & Scinto LREP CLMN Number of Claims: 13 ECL Exemplary Claim: 1 DRWN 2 Drawing Figure(s); 1 Drawing Page(s) LN.CNT 758 CAS INDEXING IS AVAILABLE FOR THIS PATENT. An electrophotographic photosensitive member is formed by disposing a photosensitive layer and a protective layer in this order on an

AB An electrophotographic photosensitive member is formed by disposing a photosensitive layer and a protective layer in this order on an electroconductive support. The protective layer is formed from a resin obtained by polymerization of a curable acrylic monomer having at least three acrylic groups, i.e., acryloyl and/or methacryloyl groups. The protective layer not only shows a good durability against wearing but also can contain fine electroconductive particles therein with a good dispersibility because of the presence of the acrylic groups aiding the dispersion.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 141313-83-9

(Electrophotog. photoconductors with protective layer from)

RN 141313-83-9 USPATFULL

CN 2-Propenoic acid, 2-[[(1-oxo-2-propenyl)oxy]methyl]-2-[[3-[(1-oxo-2-propenyl)oxy]-2-[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-1,3-propanediyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 141313-82-8 CMF C24 H30 O11